

What is claimed is:

1. A motor-driven compass saw machine (1), having a housing (2) that contains a longitudinally moving lifter rod (4), which supports a saw blade (3),
5 and an oscillation mechanism that is able to impart a variable oscillation stroke, which is oriented lateral to the longitudinal motion, to the saw blade (3), wherein it is possible to automatically adjust the oscillation stroke smoothly between the maximum and minimum stroke during the sawing process, as a function of the operating mode.

10

2. The compass saw machine as recited in claim 1, whose oscillation mechanism has a roller lever (5) that is disposed in the housing (2), can rotate around a horizontal first axis (50), and supports a roller (51) that remains in contact with the saw blade (3) and can rotate around a horizontal second axis
15 (55), and whose oscillation mechanism has a fork lever (6) that periodically deflects the roller lever (5), wherein it is possible to control the oscillation stroke as a function of the pressure of the saw blade (3) against a work piece to be sawn.

20 3. The compass saw machine as recited in claim 2, wherein the oscillation mechanism includes a spring element (53) that is disposed between the housing (2) and the end (52) of the roller lever (5) oriented away from the roller and cooperates with a component parallel to the deflection direction of the fork lever (6).

25

4. The compass saw machine as recited in claim 3, wherein parallel to the spring element (53), a damping device (54) is disposed between the housing (2) and the end (52) of the roller lever (5) oriented away from the roller.

30

5. The compass saw machine as recited in one of the preceding claims,

wherein underneath the roller lever (5), in the region of its end (52) oriented away from the roller, a first stop (20) is provided on the housing (2).

6. The compass saw machine as recited in one of the preceding claims,
5 wherein above the roller lever (5), in the region of its end (52) oriented away from the roller, a second stop (21) is provided on the housing (2).

7. The compass saw machine as recited in claim 6,
wherein the second stop (21) can be set to various distances from the roller lever
10 (5).

8. The compass saw machine as recited in claim 7,
wherein the second stop (21) can be manually set to discrete distances from the
roller lever (5).

15

9. The compass saw machine as recited in one of the preceding claims,
wherein the saw blade (3) is pressed against the roller (51) by a compression
spring (30) whose compression spring force (F_2) is weaker than the spring force
(F_1) of the spring element (53).

20

10. The compass saw machine as recited in one of the preceding claims,
wherein a deflection of the roller lever (5) only occurs if the advancing force (F_3)
of the compass saw machine (1) is greater than the difference between the
spring force (F_1) and the compression spring force (F_2).

25

11. The compass saw machine as recited in one of the preceding claims,
wherein it has a shutoff mechanism, in particular a mechanical device for
compressing the spring element (53), which suppresses the parallel component
of the spring element (53).

30